### SHORT COURSE REGISTRATION FORM

## An Overview of Applied Vacuum Technology

# New Mexico Chapter of AVS - The Science and Technology Society Monday & Tuesday, December 2 & 3, 2002

Please FAX registration forms to Cheryl Brozena at 505 277 • 5433.

Name	Company_		
Address			
Telephone # FAX #	E-mail		
Method of payment (please check one): ☐ Check	☐ Mastercard	l □ Visa	☐ Student scholarship applicant
Credit card number:	_ Name on cred	lit card:	
Expiration date: Signature authori	zing use of cred	it card:	
Please make checks payable to AVS/NM Chapter and mail		Cheryl N	M. Brozena, AVS/NMC
		1213 Ge	orgia NE
		Albuque	erque, NM 87110
Students wishing to pay their course fees using a cro	edit card can F	X their co	ompleeted registration form to 505 277.5433

## Please register as soon as possible Thank You



## New Mexico Chapter of AVS - The Science and Technology Society

#### FALL 2003 Course offering



## An Overview of Applied Vacuum Technology

Course Date: Monday & Tuesday, December 2 & 3, 2002 Course Time: 8:30 am • 4:30 pm • lunch is provided

Course Fee: \$875

Course Location: Wyndham Albuquerque Hotel at the Sunport

2910 Yale Blvd SE

Albuquerque, NM 87106

WHO SHOULD ATTEND:
Managers, technicians, engineers and scientists who desire an introduction to the concepts, hardware and instrumentation used in applied vacuum technology today. Those interested in a short review of vacuum basics will also find this course valuable.

Course Description: The course begins with a definition of vacuum and a description of the physical conditions existing in a vacuum environment. Following this introduction will be a discussion of gases at low pressures and the interactions between gases and solids. The phenomena of gas flow though vacuum systems will then be examined. The primary components of vacuum systems, with an emphasis on pumps and gauges, will be described.

Requirements for materials compatible with the vacuum environment will be discussed. Various sealing techniques will be described, including coverage of all demountable flange systems in common use today. Common vacuum system configurations and operational procedures will be outlined. The course will finish with a description of vacuum leak detection methods and the far reaching applications of vacuum technology today.

Ample time for questions and discussion will be scheduled. A comprehensive list of references will be provided for those wishing to learn more detailed information about specific areas. The emphasis of the course will be to provide practical information for individuals with minimal training in vacuum technology.

Course Objectives:
Be introduced to the fundamental concepts of vacuum technology.

Learn about common vacuum system hardware and instrumentation, including pumps, gauges, flanges, valves, and feedthroughs.

Understand applications and processes involving vacuum technology.

Benefit from a "just right" two-day course (when you don't have the time or the need to attend a four- or five-day introductory course).

#### Instructor:

John W. (Woody) Weed is a Principal Member of the Technical Staff at Sandia National Laboratories. He is part of the Thin Film, Vacuum, and Multi-Chip Modules Department, where he is currently designing vacuum pumping systems for laser inertial confinement fusion systems. Other recent work includes process development and deposition of metal hydride thin films, optical coatings, electronic neutron tubes, and thin films for flat panel displays.

#### Course Enrollment:

Enrollment in the course is limited. Please register as soon as possible. On-site Registration will be offered at 8:00 am Monday, December 2, 2002 if seating is still available.

For additional course information, please contact David Adams • 505 844.8317.

For additional registration information, please contact Cheryl Brozena • 505 255.8658.

A block of rooms has been reserved at the Wyndham (505 843.7000) for students enrolled in the course. A special room rate of \$85 plus tax is available on a space available basis. Please identify yourself as an AVS/NMC participant when making room reservations order to receive the discount rate.

For more information about this course

ONLINE: http://nmavs.lanl.gov/